**DEPARTMENT OF TRANSPORTATION**
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.15

# SOURCE INSPECTION REPORT

**Resident Engineer:** Pursell, Gary
**Address:** 333 Burma Road
**City:** Oakland, CA 94607

**Report No:** SIR-001449
**Date Inspected:** 03-May-2009

**Project Name:** SAS Superstructure
**Prime Contractor:** American Bridge/Fluor Enterprises, a JV
**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

**OSM Arrival Time:** 1900
**OSM Departure Time:** 700
**Location:** Changxing Dao, Shangha

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| **Quality Control Contact:** | William (Bill) Oak | **Quality Control Present:** | ☑ Yes ☐ No |
| **Material transfer:** | ☐ Yes ☐ No ☑ N/A | **Sampled Items:** | ☐ Yes ☐ No ☑ N/A |
| **Stock Transfer:** | ☐ Yes ☐ No ☑ N/A | **OK to Cut:** | ☐ Yes ☐ No ☑ N/A |
| **Rebar Test Witness:** | ☐ Yes ☐ No ☑ N/A | **Delayed/Cancelled:** | ☐ Yes ☐ No ☑ N/A |
| **Other:** | Coatings Inspection | | |
| **Bridge No:** | 34-0006 | **Component:** | OBG 1AW,OBG 1BE,OBG 5BW, OBG 2AW |
| **Bid Item:** | 77, 78, 79 | **Lot No:** | B265 |

**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:OBG 1AW

Edge conditioning and grinding operations were being performed prior to abrasive blasting of base metal surfaces. ZPMC also performed chloride testing and values observed were 10-20us/cm on exterior surfaces.

OBG 1BE

Performed inspection in assembly area and observed mud cracked areas of Interzinc 22 overcoated with Interfine 979 “mist”. Dry film thickness readings revealed applied Interzinc 22 was in excess of specification requirements in mud crack areas.

OBG 5BW

Exterior surfaces coated with Interzinc 22 were tested for MEK all 5 rating was observed. Chloride testing observed 10us/cm and quarter rub testing exhibited a hard polished surface when scraped with the knurled edge of a quarter. Dollies were affixed for pending adhesion testing and base metal surfaces of pedestal support areas were abrasive blasted to SSPC SP-10 condition and Interzinc22 was applied. Profile amplitude was 60-82um on blasted substrate.

OBG 2AW

Exterior and internal substrate areas were abrasive blasted for chloride value, testing was observed and value was 10-20us/cm.

Cross Beam #3

Edge conditioning and de-greasing operations were being performed in preparation of abrasive blasting of base metal surfaces.

Miscellaneous Metal

Cable support assemblies and splice plate base metal surfaces were abrasive blasted and coated with Interzinc 22.

OBG 2AW

Base metal exterior surfaces were abrasive blasted and grinding of arc strikes and gouges and fins was performed followed by re-blasting, followed by application of interzinc 22. VT inspection was performed by Caltrans Larry Viars. No MT performed by ZPMC.

Miscellaneous Metal

1000 +- splice plates were inspected approximately 50% were blasted previously ABF QA representative Dave Duon rejected the work due to incomplete edge conditioning and evident sharp edges.

OBG 5BW

Sanding and screening in process to remove dry-spray on exterior surfaces in preparation of mist coat. Masking of faying surfaces was also in process.

A cursory condition survey was conducted with ABF QA Manager Bill Oak to ascertain and estimate timeframe for damage repairs to in process assembling of Lift #3.

Note: All inspections were performed jointly with ZPMC & ABF QA/QC representatives and Caltrans QA Lumley. Also in attendance was International Protective Coatings Technical service representative Mr. Peng ZiLi.

**Summary of Conversations:**

International Protective Coatings Mr.Peng ZiLi was consulted as to repairs of mud cracked areas, Mr.Peng ZiLi stated removal applied coatings via abrasive blasting to base metal and re-apply system to specified dry film thickness.

**Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang. (858)-699-9549, who represents the Office of Structural Materials for your project.

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| **Inspected By:** | Lumley,James | Quality Assurance Inspector |
| **Reviewed By:** | Carreon,Albert | QA Reviewer |